

TABLE 15. Doctorate recipients, by sex and subfield of study: 2009

Field of study	Total <sup>a</sup>	Male	Female	% female
All fields	49,562	26,338	23,190	46.8
Life sciences	11,402	5,180	6,212	54.5
Agricultural sciences/natural resources	1,282	721	559	43.6
Agricultural economics	116	61	55	47.4
Agronomy and crop science	77	54	23	29.9
Animal science, other	74	43	31	41.9
Environmental science	200	90	110	55.0
Fishing and fisheries sciences and management	67	46	21	31.3
Forest/resources management	53	32	21	39.6
Horticulture science	55	30	25	45.5
Natural resources/conservation	83	40	42	50.6
Wildlife/range management	34	23	11	32.4
Animal breeding, animal nutrition, poultry science	63	40	23	36.5
Food science, food technology-other	140	65	74	52.9
Forest biology, wood science, forestry sciences-other	86	61	25	29.1
Plant breeding, plant pathology, plant sciences-other	145	81	64	44.1
Soil chemistry, soil sciences-other	67	39	28	41.8
Agriculture-general, agricultural sciences-other	22	16	6	27.3
Biological/biomedical sciences	8,026	3,833	4,187	52.2
Biochemistry	859	456	403	46.9
Bioinformatics	174	122	52	29.9
Biomedical sciences	298	148	149	50.0
Biometrics and biostatistics	115	57	57	49.6
Biophysics	197	129	68	34.5
Cancer biology	273	121	152	55.7
Cell/cellular biology and histology	354	181	173	48.9
Ecology	456	219	237	52.0
Entomology	131	75	56	42.7
Evolutionary biology	215	112	103	47.9
Immunology	433	184	249	57.5
Microbiology	587	257	329	56.0
Molecular biology	763	327	435	57.0
Neurosciences	979	465	514	52.5
Nutrition sciences	173	43	130	75.1
Pharmacology, human and animal	344	158	185	53.8
Physiology, human and animal	245	107	138	56.3
Toxicology	121	51	70	57.9
Zoology	79	35	44	55.7
Biology/biomedical sciences, general	174	82	91	52.3
Anatomy, developmental biology	201	102	99	49.3
Bacteriology, parasitology	44	21	23	52.3
Botany, plant pathology, plant physiology	152	83	69	45.4
Endocrinology, human/animal pathology	139	64	75	54.0
Genetics-human/animal, plant genetics	412	182	230	55.8
Biotechnology, biology/biomedical sciences-other	108	52	56	51.9
Health sciences	2,094	626	1,466	70.0
Epidemiology	273	76	197	72.2
Health systems/services administration	69	30	39	56.5
Kinesiology/exercise science	212	111	100	47.2
Medicinal/pharmaceutical sciences	277	150	127	45.8
Nursing science	509	27	482	94.7
Rehabilitation/therapeutic services	80	29	51	63.8
Speech-language pathology and audiology	121	23	98	81.0
Veterinary sciences	60	30	30	50.0
Environmental health, public health	343	102	241	70.3
Health sciences, aggregated	150	48	101	67.3

TABLE 15. Doctorate recipients, by sex and subfield of study: 2009

Field of study	Total <sup>a</sup>	Male	Female	% female
Physical sciences	8,331	5,868	2,450	29.4
Astronomy	262	178	84	32.1
Astronomy	97	58	39	40.2
Astrophysics	165	120	45	27.3
Atmospheric science and meteorology	167	117	50	29.9
Atmospheric physics, meteorology	57	45	12	21.1
Atmospheric chemistry, atmospheric sciences-general, atmospheric sciences-other	110	72	38	34.5
Chemistry	2,398	1,498	894	37.3
Analytical chemistry	363	192	171	47.1
Inorganic chemistry	331	213	117	35.3
Organic chemistry	688	468	220	32.0
Physical chemistry	320	208	111	34.7
Polymer chemistry	119	82	37	31.1
Theoretical chemistry	85	62	23	27.1
Chemistry, general	304	187	113	37.2
Chemistry, other	188	86	102	54.3
Computer and information sciences	1,611	1,259	351	21.8
Computer science	1,364	1,098	266	19.5
Information science and systems	140	90	50	35.7
Computer and information science, other	107	71	35	32.7
Geological and earth sciences	493	304	189	38.3
Geology	142	95	47	33.1
Geophysics and seismology	102	64	38	37.3
Geochemistry, mineralogy	90	47	43	47.8
Paleontology, stratigraphy	48	33	15	31.3
Geomorphology, geological sciences-general, geological sciences-other	111	65	46	41.4
Mathematics	1,554	1,068	483	31.1
Algebra	139	104	35	25.2
Analysis and functional analysis	130	95	35	26.9
Geometry/geometric analysis	89	74	15	16.9
Number theory	64	48	16	25.0
Statistics	353	200	151	42.8
Applied mathematics, computing theory	398	280	118	29.6
Logic, topology/foundations	111	83	27	24.3
Operations research, mathematics/statistics-general, mathematics/statistics-other	270	184	86	31.9
Ocean/marine sciences	217	118	99	45.6
Marine sciences	78	38	40	51.3
Oceanography, chemical and physical	81	44	37	45.7
Ocean/marine sciences, aggregated	58	36	22	37.9
Physics	1,629	1,326	300	18.4
Applied physics	133	108	24	18.0
Biophysics	104	76	28	26.9
Condensed matter/low temperature physics	401	345	56	14.0
Elementary particle physics	219	181	38	17.4
Nuclear physics	73	59	14	19.2
Plasma/fusion physics	58	45	13	22.4
Physics, general	212	169	41	19.3
Physics, other	116	93	23	19.8
Acoustics, optics/phototonics	185	151	34	18.4
Atomic physics, polymer physics	128	99	29	22.7

TABLE 15. Doctorate recipients, by sex and subfield of study: 2009

Field of study	Total <sup>a</sup>	Male	Female	% female
Social sciences and psychology	7,836	3,259	4,575	58.4
Psychology	3,471	991	2,480	71.4
Clinical psychology	1,198	285	913	76.2
Cognitive psychology and psycholinguistics	189	96	93	49.2
Counseling	420	104	316	75.2
Developmental and child psychology	182	25	157	86.3
Experimental psychology	145	56	89	61.4
Educational psychology	73	16	57	78.1
Family psychology	34	12	22	64.7
Human development and family studies	145	30	115	79.3
Industrial and organizational	196	76	120	61.2
Physiological/psychobiology	87	32	55	63.2
School psychology	121	29	92	76.0
Social psychology	226	82	144	63.7
Psychology, general	216	68	148	68.5
Psychology, aggregated	239	80	159	66.5
Anthropology	503	195	308	61.2
Economics, econometrics	1,121	737	383	34.2
Political science	683	409	273	40.0
Sociology	664	263	401	60.4
Other social sciences	1,394	664	730	52.4
Area/ethnic/cultural/gender studies	111	41	70	63.1
Criminal justice and corrections	78	46	32	41.0
Criminology	61	20	41	67.2
Geography	209	131	78	37.3
International relations/affairs	101	55	46	45.5
Linguistics	275	108	167	60.7
Public policy analysis	227	119	108	47.6
Urban/city, community and regional planning	92	54	38	41.3
Social sciences, general	52	22	30	57.7
Demography, statistics, urban affairs, social sciences-other	188	68	120	63.8
Engineering	7,634	6,006	1,623	21.3
Aerospace, aeronautical and astronautical engineering	296	254	41	13.9
Bioengineering and biomedical engineering	828	525	302	36.5
Chemical engineering	808	592	216	26.7
Civil engineering	708	560	148	20.9
Computer engineering	379	312	66	17.4
Electrical and electronics engineering	1,694	1,435	259	15.3
Environmental health engineering	120	77	43	35.8
Industrial engineering	252	186	66	26.2
Materials science engineering	622	466	156	25.1
Mechanical engineering	1,095	942	152	13.9
Nuclear engineering	73	63	10	13.7
Operations research	79	60	19	24.1
Systems engineering	67	56	11	16.4
Other engineering, aggregated	613	478	134	21.9
Education	6,531	2,160	4,370	66.9
Education administration	2,149	835	1,314	61.1
Educational administration and supervision	587	231	356	60.6
Educational leadership	1,562	604	958	61.3
Education research	2,656	814	1,842	69.4
Counseling education/counseling and guidance	235	48	187	79.6
Curriculum and instruction	777	208	569	73.2
Educational assessment/testing/measure	89	35	54	60.7

TABLE 15. Doctorate recipients, by sex and subfield of study: 2009

Field of study	Total <sup>a</sup>	Male	Female	% female
Educational psychology	324	92	232	71.6
Educational statistics/research methods	60	18	42	70.0
Educational/instructional media design	151	82	69	45.7
Higher education/evaluation and research	509	217	292	57.4
School psychology	118	24	94	79.7
Social/philosophical foundations of education	124	45	79	63.7
Special education	269	45	224	83.3
Teacher education	338	96	242	71.6
Adult and continuing teacher education	139	47	92	66.2
Elementary teacher education	69	15	54	78.3
Pre-elementary/early childhood teacher education	80	11	69	86.3
Secondary teacher education	50	23	27	54.0
Teaching fields	903	275	627	69.4
Art education	46	11	35	76.1
English education	51	9	42	82.4
Foreign languages education	57	18	38	66.7
Health education	53	15	38	71.7
Mathematics education	161	56	105	65.2
Music education	68	34	34	50.0
Physical education and coaching	34	16	18	52.9
Reading education	117	8	109	93.2
Science education	118	42	76	64.4
Teacher education and professional development, other	75	18	57	76.0
Teaching fields, aggregated	123	48	75	61.0
Other education	485	140	345	71.1
Education, general	213	67	146	68.5
Education, other	272	73	199	73.2
Humanities	4,899	2,358	2,540	51.8
Foreign languages and literature	602	225	377	62.6
Spanish	237	97	140	59.1
German	71	28	43	60.6
French, Italian	154	51	103	66.9
Other aggregated languages	140	49	91	65.0
History	1,045	607	438	41.9
American history (U.S. and Canada)	431	257	174	40.4
Asian history	55	28	27	49.1
European history	214	119	95	44.4
History, science and technology and society	56	31	25	44.6
Latin American history	67	31	36	53.7
Middle/Near East studies	61	33	28	45.9
History, general	65	46	19	29.2
History, aggregated	96	62	34	35.4
Letters	1,414	524	889	62.9
American literature (U.S. and Canada)	326	117	209	64.1
Classics	77	40	37	48.1
Comparative literature	179	63	115	64.2
English language	105	42	63	60.0
English literature (British and Commonwealth)	389	122	267	68.6
Speech and rhetorical studies	138	49	89	64.5
Letters, aggregated	200	91	109	54.5
Other humanities, aggregated	1,838	1,002	836	45.5
American/U.S. studies	118	42	76	64.4
Archaeology	58	24	34	58.6
Art history/criticism/conservation	227	48	179	78.9

TABLE 15. Doctorate recipients, by sex and subfield of study: 2009

Field of study	Total <sup>a</sup>	Male	Female	% female
Drama/theater arts	104	31	73	70.2
Music	75	40	35	46.7
Music theory and composition	100	78	22	22.0
Music performance	84	41	43	51.2
Musicology/ethnomusicology	127	66	61	48.0
Philosophy	423	298	125	29.6
Religion/religious studies	323	227	96	29.7
Other humanities, aggregated	199	107	92	46.2
Other non-S&E fields	2,929	1,507	1,420	48.5
Business management/administrative services	1,403	871	532	37.9
Accounting	141	89	52	36.9
Business administration and management	173	114	59	34.1
Human resources development	74	34	40	54.1
Organizational behavior	167	74	93	55.7
Management information systems/business statistics	135	94	41	30.4
Marketing management and research	182	112	70	38.5
Business management/administration, general	89	61	28	31.5
Banking/financial services, finance	218	161	57	26.1
Other aggregated business fields	224	132	92	41.1
Communications	626	263	363	58.0
Communication research	129	47	82	63.6
Communication theory	38	16	22	57.9
Mass communication/media studies	206	103	103	50.0
Communication, general	120	40	80	66.7
Communication, aggregated	133	57	76	57.1
Fields not elsewhere classified	900	373	525	58.3
Architecture/environmental design	79	41	38	48.1
Family/consumer science/human science	59	8	51	86.4
Parks/sports/recreation/leisure/fitness	69	33	35	50.7
Public administration	129	65	64	49.6
Social work	333	86	246	73.9
Theology/religious education	129	89	40	31.0
Fields not elsewhere classified, aggregated	102	51	51	50.0

<sup>a</sup> Totals include doctorate recipients who did not report sex (n=34).

NOTES: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See appendix A for details of field aggregations.

SOURCE: NSF/NIH/USED/USDA/NEH/NASA, 2009 Survey of Earned Doctorates.